	Application No.	Applicant(s)	
Notice of Allowability	09/993,592	GUNLUK, OKTAY NECIP	
	Examiner	Art Unit	
	Nguyen Ngo	2663	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to *amendment filed 09/29/2005*.

2. ☒ The allowed claim(s) is/are *3,5-10 and 14-18*.

3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a) ☐ All   b) ☐ Some*   c) ☐ None   of the:

      1. ☐ Certified copies of the priority documents have been received.

      2. ☐ Certified copies of the priority documents have been received in Application No. _____ .

      3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

    * Certified copies not received: _____ .

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.

5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.

    (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached

        1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.

    (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.

    Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).

6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☐ Notice of References Cited (PTO-892)

2. ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)

3. ☐ Information Disclosure Statements (PTO-1449 or PTO/SB/08), Paper No./Mail Date _____

4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material

5. ☐ Notice of Informal Patent Application (PTO-152)

6. ☐ Interview Summary (PTO-413), Paper No./Mail Date _____ .

7. ☐ Examiner's Amendment/Comment

8. ☒ Examiner's Statement of Reasons for Allowance

9. ☐ Other _____.

DETAILED ACTION

Response to Amendment

1.   This communication is in response to the amendment filed on 09/29/05. All

changes made to the claims have been entered. Accordingly, Claims 3, 5, 6, 7, 8, 9,

10, 14, 15, 16, 17, and 18 are currently pending in the application.

Allowable Subject Matter

2.   Claims 3, 5, 6, 7, 8, 9, 10, 14, 15, 16, 17, and 18 are allowed.

The following is a statement of reasons for the indication of allowable subject matter:

3.   Claim 3 is allowable over the prior art of record since the cited references taken

individually or in combination fail to particularly disclose **having the constrained**

diverse shortest path routing method minimizes use of optical transponders in

obtaining the final route according to the specific function stated in claim 3. It is

noted that the closest prior art, Sofman et al. (US 5946295) discloses a method for

routing lower multiplex level demands in a telecommunications network including a

plurality of interconnected nodes to form higher multiplex level demand routes.

However the stated prior art fails to disclose or render obvious to the above underline

limitations as claimed.

4.   Claim 5 is allowable over the prior art of record since the cited references taken

individually or in combination fail to particularly disclose **having the initial cost and the**

final cost be based on one or more of a diversity cost, a capacity overload cost

and a routing cost and computed as Total Cost according to the function of claim

5. It is noted that the closest prior art, Sofman et al. (US 5946295) discloses a method

for routing lower multiplex level demands in a telecommunications network including a

plurality of interconnected nodes to form higher multiplex level demand routes.

However the stated prior art fails to disclose or render obvious to the above underline

limitations as claimed.

5.   Claim 14 is allowable over the prior art of record since the cited references taken

individually or in combination fail to particularly disclose **creating an initial partial path**

pn having parameters node(pn), cost(pn), violation set(pn) and parent(pn)

wherein these parameters are defined as seen in claim 14 . It is noted that the

closest prior art, Huang et al. (US 6301244) discloses a method for one-to-all route

selection in communication networks with multiple QoS metrics, wherein this method

takes a first metric as a constraint and a second metric as an optimization target. That

the potential objective is to find a path between a source node and each node such that

the delay of the path does not exceed a path delay constraint and the cost of the path is

minimized. However the stated prior art fails to disclose or render obvious to the above

underline limitations as claimed.

6.   Claim 15 is allowable over the prior art of record since the cited references taken

individually or in combination fail to particularly disclose **creating an partial path pn**

having parameters node(pn), cost(pn), violation set(pn) and parent(pn) wherein these parameters are defined as seen in claim 15 . It is noted that the closest prior art, Huang et al. (US 6301244) discloses a method for one-to-all route selection in communication networks with multiple QoS metrics, wherein this method takes a first metric as a constraint and a second metric as an optimization target. That the potential objective is to find a path between a source node and each node such that the delay of the path does not exceed a path delay constraint and the cost of the path is minimized. However the stated prior art fails to disclose or render obvious to the above underline limitations as claimed.

7.   Claim 16 is allowable over the prior art of record since the cited references taken individually or in combination fail to particularly disclose **selecting a partial path pn having parameters node(pn), cost(pn), violation set(pn) and parent(pn) from one or more partial paths, where cost(pn) is minimal in comparison to costs associated with other partial paths, when a Heap value is not equal to null; and equating partial path pn with a route Ai-Zi if node(pn) is equal to Zi..** It is noted that the closest prior art, Huang et al. (US 6301244) discloses a method for one-to-all route selection in communication networks with multiple QoS metrics, wherein this method takes a first metric as a constraint and a second metric as an optimization target. That the potential objective is to find a path between a source node and each node such that the delay of the path does not exceed a path delay constraint and the cost of the path is

minimized. However the stated prior art fails to disclose or render obvious to the above underline limitations as claimed.

8.   Claim 17 is allowable over the prior art of record since the cited references taken individually or in combination fail to particularly disclose **selecting a partial path pn having parameters node(pn), cost(pn), violation set(pn) and parent(pn) from one or more partial paths, where cost(pn) is minimal in comparison to costs associated with other partial paths, when a Heap value is not equal to null; and the further limitations set forth in claim 17.** It is noted that the closest prior art, Huang et al. (US 6301244) discloses a method for one-to-all route selection in communication networks with multiple QoS metrics, wherein this method takes a first metric as a constraint and a second metric as an optimization target. That the potential objective is to find a path between a source node and each node such that the delay of the path does not exceed a path delay constraint and the cost of the path is minimized. However the stated prior art fails to disclose or render obvious to the above underline limitations as claimed.

Conclusion

9.   Any inquiry concerning this communication or earlier communications from the examiner should be directed to Nguyen Ngo whose telephone number is (571) 272-8398. The examiner can normally be reached on Monday-Friday 7am - 3:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ricky Ngo can be reached on (571) 272-3139. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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Nguyen Ngo
United States Patent & Trademark Office
Patent Examiner AU 2663
(571) 272-8398

RICKY Q. NGO
SUPERVISORY PATENT EXAMINER